INTEGRATED ADVANCE MACHINING USING CAD/CAM SYSTEM

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ABSTRACT

Advance machining process is now becoming very important especially when dealing with complex shape machining product. The supporting tool used in this process involves Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM). In this project, Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) software is used to develop a side mirror model from 3-D modeling to machining code generation that ready for machining process. Initially, data obtained does not follow specification requirement hence next simulation was done. The second trial produced much better cutting shape as offset is introduced to the workpiece for roughness process and tool path modification. The established information from machining process is transferred to CNC machine to make the product core, cavity and slider. This core, cavity and slider are used to produce product using vacuum casting which is then compared with the actual part produced from injection molding process. The final part is compared to determine the similarity of their complex shape between product from vacuum casting in this final project with the Original Equipment Manufacturing (OEM) side mirror car that produce from injection molding.

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